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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/792,267

03/04/2004

Klaus Simon

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4229

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7590

11/02/2009

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EXAMINER

YAN, REN LUO

ART UNIT

PAPER NUMBER

2854

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/792,267	Applicant(s) SIMON, KLAUS	
	Examiner Ren L. Yan	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

In view of the newly discovered prior art (Mercer et al, US patent No. 2,905,085), the previous Non-final rejection dated 4-7-2009 is hereby withdrawn and a new ground of rejections is setting forth below:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeans (7,070,406) in view of Mercer et al(2,905,085).

With respect to claims 1, 3, 6-7, 10 and 12, the patent to Jeans teaches the structure of a printing apparatus as claimed including a curved member 69 carrying a stamp surface 21t, said stamp surface including a pattern 20q, wherein said curved member is configured to roll over a substrate 101 to be printed on with said pattern; a resist mechanism 300 for providing a liquid layer of resist by spraying the liquid layer of the resist in a shower-like configuration on the substrate 101, and an illumination system 99 disposed inside the curved member 69 configured to direct light to a region of contact between said stamp surface and said substrate so as to set the liquid layer of resist upon illumination. See Figs. 32-34, 40-42 and 46 and column 8, lines 25-38 and column 18, lines 4-48 in Jeans for details.

However, Jeans does not teach that the stamp surface having a plurality of separate curved sides each including a pattern and wherein as the curved member rolls over the substrate, the pattern of each of the curved sides remains stationary relative to each of the curved sides.

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Mercer et al teach in a printing apparatus a curved member 2 carrying a stamp surface having a plurality of separate curved sides 4, each of the curved sides including a pattern 5, wherein as the curved member rolls over the substrate 12 to carry out the printing operation, the pattern 5 of each of the curved sides remains stationary relative to each of the curved sides. See 1 and column 2, lines 27-33 in Mercer et al for example.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the stamping patterns on separate curved sides on the curved member 69 in the printing apparatus of Jeans as taught by Mercer et al as this substitute of a known stamping structure would provide the predictable result of transferring the patterns from each of the curved sides onto the substrate and thus achieve the same printing outcome. MPEP 2141 Part I regarding **KSR** holds that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."

With respect to claims 2 and 11, Jeans teaches in Fig. 39 an embodiment in that the curved member is a belt 100 that forms a triangular cross section with curved sides. In view of this teaching, it would have been obvious to those skilled in the art to make the curved member 69 of Jeans with separate curved sides as taught by Mercer et al into a triangular shape so as to yield the same predictable result of rolling each of the curved sides over the substrate to carry out the printing operation.

Regarding claims 4 and 13, the light 99 and the reflector 99r used in Jeans is considered as the thermal elements that is capable of being configured to control temperature of said curved member, to align said stamp surface, and to correct magnification of said stamp surface as recited.

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Regarding claims 5 and 14, the stamp surface 69 of Jeans is comprised of glass. Column 17, lines 36-50.

Regarding claims 16 and 17, the plurality of separate curved sides of the stamp surface of Jeans, as modified by Mercer et al have a same curvature.

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeans in view of Mercer et al as applied to claims 1 and 11 above, and further in view of Hamilton(3,362,804).

Jeans, as modified by Mercer et al teaches all that is claimed except for the use of alignment marks along the stamp surface for aligning with markers along the substrate. Hamilton teaches the use of alignment markers 116 along a stamp surface 114 for aligning with markers 108 along a substrate 110. See column 7, lines 11-32 in Hamilton for example.

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the stamp surface and substrate surface with alignment markers as taught by Hamilton in order to accurately locate the stamp surface with respect to the surface of the substrate to ensure the image patterns are printed at the desired locations on the substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L. Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ren L Yan/
Primary Examiner, Art Unit 2854
October 27, 2009